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MISCELLANEOUS.

From the Farmer's Journal.
THREE DAYS IN EDGEcombe.
BY EDMUND RUFFIN.

From rumor and uncertain and loose verbal reports, I had learned that agricultural improvement had been making great and remarkable progress in Edgecombe county. What I knew generally of the character of the soils of the pine region, and of the great agent for their improvement, marl, elsewhere, and which was reported to have been the prime fertilizer in Edgecombe, made me desirous of visiting that county, and becoming personally acquainted with some of the best improved farms and their proprietors. This wish was made the stronger, but the accomplishment not at all forwarded, by my having received from the Agricultural Society of that county, some eighteen months ago, an invitation to deliver an address at its then next annual meeting. While highly appreciating that compliment, I was under the necessity of declining the honorable service required. My engagements then forbade my undertaking the task. And even if free to act, I have never estimated so much value the instruction and benefit to be conveyed in formal addresses to Agricultural Societies. The occasion, and the mixed assemblage, both would render it improper to treat, for instruction, of matters of farming practice. Hence, the speaker on such occasions is almost compelled to fall into the far more easy and customary way, of uttering a mere declamation on agriculture, which in most cases is such as may be truly termed "an essay on agricultural things in general, and of nothing in particular," and is of no practical use whatever. It is not so much the fault of the writers or speakers of such addresses, as it is of the occasion, that such formal addresses serve to instruct in agricultural knowledge, as little as do Fourth of July speeches in statesmanship, or in the science of government.

It was but very recently, (in August, 1854,) that circumstances permitted my visiting Edgecombe—when returning to Virginia, from a visit to the upper part of North Carolina. After forming the intention, there was but a few days' time to notify John S. Dancy, Esq., of my coming. With this gentleman only, I had had some correspondence, as the former president of the Edgecombe Agricultural Society. I had never seen any resident, and seen no more of the county, than was afforded by the passage on the Wilmington railroad through its borders, and which is, generally along a ridge of its poorer land.

When reaching the Rocky Mount station, I had counted on taking the mail-coach to Tarboro; but I found Mr. Dancy and his carriage awaiting my arrival. This I should have regretted, if merely providing for my personal accommodation. But the private conveyance permitted the traveling a different route, and the passage through, and view of a number of the best farms in the county. We crossed Tar River by Rocky Mount, at the picturesque falls of the river, made, as are the most eastern falls of all our Atlantic rivers, by the ridge of granite which passes across the courses of all that enter the ocean. Our road passed not very far from the river, and again crossed it below. The lands, like nearly all in the county, are as nearly level as land can be. The original growth, more or less of pine, indicates soil of but moderate natural fertility, and of acid constitution. Still, these lands near the river, as usual in regard to all rivers, were much better than the more remote lands. We stopped to see a large marl excavation, near the road, and also saw evidence of the other usual and more peculiar operations for the improvement of lands. But it is unnecessary to speak of them in advance of the better views of more full operations afterwards had elsewhere.

We reached the beautiful village of Tarborough late in the afternoon. The next morning we set out, on horseback, first to visit Panola, the farm owned and cultivated jointly, by Messrs. Robert Norfleet and John S. Dancy. It was purchased but a few years ago, (at \$15 the acre,) and is now under the third year's crop made by the present proprietors. It was before greatly wanting in buildings as well as all the improvements; and the full cropping of the farm has not been attained before this year. The growth of the crop of Panola, was such as might be expected from a high degree of recent fertilization, and judicious culture. But I shall have but little to say on that head, important as it is, either of this or other well improved farms that I viewed in the like lively and cursory manner. All the crops were good, and of remarkable uniformity of growth, for such large spaces and different farms. On the original pine lands, (as nearly all were, except swamps and very low river bottoms,) the different rates of production of different farms seemed to be greater or less in proportion to the length of time which had previously been given to the peculiar and continual manuring of this county.

The dwelling houses for the negroes on Panola have all been recently erected by the present proprietors, on a regular and uniform plan. From their outside appearance, they seemed of superior order to any I have seen elsewhere, and each family more comfortably lodged, than any known more agricultural laborers, whether slave or free. The farm buildings were also new, and well arranged for their purposes.

The stock yards were large, permanent, and well enclosed, with straight plank or sawed fence.

Here we saw one end of the work then carried on by the whole force of the farm. Twelve small carts, each drawn by one mule, were bringing and emptying ditch-bank earth over the whole surface of these stock yards. The cow-yard, in which the cattle were penned through summer without litter, and through winter with litter, was to receive a layer of above six inches depth of this earth. The adjoining log lot, in which the hogs for slaughter were fattened, would have twelve inches or more.

The length of the hauling, from the ditch-bank to the lots, seemed to be between 300 and 400 yards, or double this distance for each trip. The whole of the bedding of earth, with the other ingredients of the general mass, will be next spring thrown into low ridges on heaps, for intermixture and better preparation, and afterwards be carted to the fields.

The earth was the old bank formerly thrown out of a large open ditch dug through a long low depression, and which served to drain the adjacent ground. The upper part of most of the earth thrown out was mostly of rich swamp soil. But parts even of the upper layers were comparatively poor and sandy. And the bottom layer, or subsoil, before dug out was throughout a sandy clay, which hardened into clods when dug, and which seemed quite poor. To this last layer, and material for compost, the men were then adding a deepening of six or eight inches, which will be used in the like manner hereafter.

If not before informed of the general and great beneficial effects of such compost, I should have doubted whether even the richest of this earth, as material, would have failed for the long and double transportation, and several haulings. And as to the (apparently poorest earth thus used, I would not have wished it placed on my land, if to be done without any cost to myself. Indeed, if, without any previous information of either the persons so operating, or of the effects of such labors, I had first seen this precise operation in progress, I would have inferred that the proprietor was on the road to ruin, instead of to high improvement of his estate and its income. But I will never suppose any mere opinion, founded in advance of all knowledge of facts, to the contrary deductions from facts well ascertained and tested by sufficient time and experience. And therefore, whatever imperfections and errors, and even partial laws as consequences, may present partial exceptions to and errors in the general practice of compost manuring in Edgecombe, I am bound to admit, and fully believe, that the practice in general has been highly improving, beneficial, and profitable. But for the present, I will suspend this subject, and renew it after reaching the conclusion of my information and observation of the operation.

We had to hasten from Panola to be in time to reach Cotton Valley, the farm of Baker Station, Esq., who, in the estimation of his countymen, stands highest in the rank of the improving and profit-making cultivators and good farmers of Edgecombe. It is a good custom of this county, that after the crops are all "hauled," or their cultivation is ended, a barbecue is prepared on some one's farm in each neighborhood, and to which are invited all the neighboring farmers. By lucky accident, and without ever having had any previous notice thereof, one of these social meetings was to take place on this day, under the shelter of the host's extensive cotton loft. Notwithstanding a cloudy and threatening morning, which was followed by a heavy rain while we were at dinner, there were assembled about 60 of the neighboring farmers and residents of all degrees. For such an entertainment, such as in our country, and according to our social usages, must be open to nearly all who choose to come, the persons present indicated a population of high order, in regard to intelligence, and good deportment. Of all whom I heard converse on farming, (and there was no other subject of conversation,) there was no one who did not speak to good purpose. The only fault I observed was that there were too many who said nothing, and who seemed too diffident, and modest, to act otherwise than as attentive listeners.

The speedy return of fair weather enabled a large party of us to ride with our host along the roads and paths that passed through his extensive and magnificent crops of cotton and corn—and in some parts of our route, through crops without paths, though at the expense of considerable wetting from the rain-water still remaining on the cotton leaves. A small part of the low land is a true peat earth, which is so entirely of vegetable constitution, that, though well drained, and cultivated, it is incapable of sustaining the growth of corn—or of bearing the weight of horses. This, I should infer, would furnish the best large material for Mr. Staton's compost heaps. But as yet he has only used for that purpose the banks of his numerous ditches—and of the peat, only so far as the ditch banks were of that earth. When all the ditch banks shall have been thus used, he will use the peat, to such extent as it is of convenient distance to the fields. The quantity will exceed any probable demand for making compost, for many years.

We returned to the village early—but not to be alone. My host had placed me in his office, on the street, to which, his farming friends of the neighborhood, and my new acquaintances, had convenient access at all times. And rarely, from breakfast time, to late bed-time, when within doors, were we without some agreeable visitors. Indeed, during my whole stay, whether within doors, or on the road, or when

riding over and viewing farms, it may be said that there was a Committee of Agriculture in permanent session, (or in locomotion,) though often varying both in numbers and in members.

On the second morning, according to the previous invitation and arrangement of Robert R. Bridgers, Esq., about a dozen farmers started after early breakfast, for his farm of Strabane, on Fishing Creek, 9 miles from Tarborough. The ordinary good high land of the county was here, as at Cotton Valley, substituted in part by lower and rich swamp land, formerly heavily wooded, but now cleared, well drained, and under a heavy growth of cotton.

In the afternoon, I rode with Messrs. Dancy and R. Norfleet, to see the farm of Hope Lodge. This farm also is but a recent purchase of Messrs. Dancy and William Norfleet, and the improvement made by them is of still later date and less advancement, though in as good apparent progress as in other cases. The land is in four distinct and level terraces, each separated from the one next above by a short slope. The highest of these slopes was the only one that I saw on any farm that could be termed a hill-side; and this one, though of slight elevation was protected from being washed by a graduated trench running along the top. The lowest of the four terraces, is bordering on the Tar river, (in a level of which the farm lies,) and is narrow, and too low, and too much subject to being overflowed by high freshets, for cultivation. It is not however useless. Its wood, both drift, and standing and dead, furnishes a valuable supply of ashes for compost—and a still more abundant and also a valuable material in the "brown deposit" of mud and mixed leaves and other vegetable matter, left in the eddies of the floods. This latter is deemed the richest earth for the compost heaps. This earth, in one layer, and over it pure marl some inches thick, made the flooring of a pen in which the cattle were confined every night through summer. No doubt the animal excrements were best secured from waste by the contact and chemical combination with the carbonaceous material of the marl.

In the course of this day, I had visited and seen the manner of working of four different marl diggings—two on Strabane, one on Mr. John L. Bridgers' farm, (where we found 15 carts at work,) and one on Hope Lodge. There were important defects in the manner of working of all—which I pointed out, as well as the proper remedies or substitutions; and which advice may save a large portion of the expenses of future excavation and hauling. More will be said on this head, when speaking on the marling of Edgecombe more fully.

This evening we spent at the house of John L. Bridgers, Esq., in Tarborough, with some six or seven other farmers. After a late sitting, and next morning an early rising and breakfast, I returned to Rocky Mount, by a different road, to take the railroad cars for Weldon.

I will now proceed to bring together, in a more regular digest, such observations as I could make, and the information obtained, during my short visit. The statements will be necessarily meagre and imperfect, and perhaps in some cases may be erroneous, owing to misconception, or failure of means. For any such mistakes, I trust that the circumstances will serve as a sufficient excuse.

Edgecombe county, or as much of it as I saw, in its surface is almost a level, unbroken by any deep depression except the Tar river, and its considerable tributaries. There are, on almost every farm, slight depressions, usually very narrow and long, of swampy character naturally, and which serve a most useful purpose, as proper routes for open drains, and out of these ditches to furnish material of earth for compost heaps. In many cases, these slight depressions of level spread out into extensive swamps—as on Cotton Valley and Strabane—which when cleared of their gigantic forest growth, and drained, make very rich and productive land. The clearing is very laborious, though the labor is lessened and divided, by bolting, and so "deadening" the large trees. The ditching also, through unmatted roots and among standing trees, is laborious, but durable and effectual for drainage. The soil is deep, but rarely peaty, and of such good earthy constitution, and on such sound subsoil as to be of great and permanent productiveness, under proper tillage and treatment.

The higher land is firm and mostly dry, naturally. Most of it is of some one or other intermediate grade between sandy soil and medium loam. Very little is too sandy to be of excellent texture for cotton, corn and peas—and not much, (though there is some land,) quite close and stiff enough for wheat and clover. As the culture of the latter two crops is attempted on very few farms, and to but small extent, it may be considered that the land generally is of the best possible texture for all the great crops, best and well suited to the climate, which in the order of their usual extent of culture, are in the order named above, of first cotton, next corn, and least peas.

The soil (exclusive of swamps) is pine-bearing and acid, and therefore especially requiring, and profited by, applications of lime. Marl very extensively underlies the land, and has been found and is used as manure on many farms. It has been eminently beneficial, whenever properly used—and where known early, was the foundation of all other improvements since introduced. The commencement of improvement, as reported, was to me especially interesting. Until some 15 years ago, the agriculture of Edgecombe was, like most other of the more

southern counties, in a very low condition. It was not then far from the truth, as to Edgecombe, as is even now erroneously supposed of it by many strangers, that its chief productions were turpentine and ague and fever. As was generally the case formerly, in lower Virginia, as well as still later in lower North Carolina, no one attempted the durable enriching of his land, and not many thought of taking the least care to avoid complete exhaustion at some future time. At that time, four farmers in the county were subscribers to and readers of the Farmers' Register, and from its contents they learned the value of marling. Three of them had marl, and began its use. These were, James S. Battle, (recently deceased,) Exum Lewis, and Dr. Dicken. Their success induced others to follow their example. Soon other materials were tried. One farmer began to make composts of earth and marl, and stable manures; another added ashes—a third cotton-seed—and others added other and smaller materials, such as salt, gypsum and guano, but in few cases, and to limited extent.

But whoever may be the just claimants of minor parts of the now general system of compost manuring, it is admitted that Baker Station, Esq., now of Cotton Valley, first practiced it extensively, and became an exemplar to his countymen in that mode of improvement, as he is understood and reported to be in general good management and good cultivation. His successful and admirable results, in the use of compost manure, in my opinion, were necessarily and greatly forwarded by his having first (or very early in his course) marled all his land, and mostly in advance of his compost applications. It is to be lamented that this course has not been general among those having accessible. Correct views of the action of marl on putrescent manures would have caused this practice of previous marling (or liming) to be deemed essential. But the loss of value caused by the omission of previous marling is mostly concealed by the applications of compost being annually repeated—so that the degree of durability of each separate dressing cannot be known.

And the subsequent application of organic matter (supplied in the composts,) was still more visibly operative, in making the previous marling the most highly beneficial. Before the improving system was begun in Edgecombe, the practice (as then and now too generally in South Carolina) was to take crops almost every year from each field, and to return less in manure than was abstracted from the land by the crops. Of course, the culture was regularly exhausting, and most of the cultivated lands had been thus made poor, and were yearly becoming poorer. Under such circumstances, (as I have urged elsewhere,) calcareous manure can have very little effect. Mr. J. S. Battle, named above as one of the pioneers in marling, and who at a later time became one of the most successful operators, often having applied marl for some four years, actually suspended the further use, under the belief that he had not been paid for his labor. Then he commenced the composting practice; and wherever his compost happened to be laid on ground formerly marled (as stated to me by his son, Wm. S. Battle, Esq., "the compost acted like a charm," and gave sufficient encouragement for his resuming and continuing the use of marl, as he did, with zealous perseverance and success.

I will now state generally, and in the cursory manner which only is permissible in a hasty sketch like this, the ordinary practices in making compost manure, of which the main features are now general in Edgecombe, and which, to more or less extent, is in use on almost every farm. The ditches on every farm, in their original banks, and the earth taken out in subsequent clearings and deepening, furnish the main supply of material, and which is nowhere yet exhausted. Much of this is of swamp or other rich soil. But some, from greater admixtures of sand, of even poor upper soil, and very often of comparatively poor subsoil, is much poorer—and as it seemed to me, too poor to be worth removal for manure. Still, all such is used for compost. Besides, the nearest wood-land (even if of poor soil) is often skinned of its upper surface—and all the upper earth in the fence corners is scraped up and removed, repeatedly—and there are additions to the more abundant earthy materials for compost. A large portion of all such earthy material, as before stated for Panola, is used to bed cattle and other live stock, in summer pens, and make the foundation and a large ingredient of the general mass, with vegetable litter, in the winter pens. In the latter part of winter, the whole mass then in the stock pens, is thrown up in low ridges, for better admixture and ripening, and then hauled out to be applied, in the drill, for cotton, is the universal practice. Where marl is available, that makes a large part of the earthy foundation. It would be much better if marl formed the larger or only supply of bedding for the pens in summer, when highly putrescent matters are so liable to decomposition, and the total waste of the greater and richer part of their substance.

As soon as the crops are laid by, in July and early in August usually, the making of manure, and collection of materials, begins. On all the arable ground not then under a crop, (which indeed is very little on most farms in summer,) the earth is carted to a pile in the centre of every acre, 100 single mule cart loads of earth to each, or about 500 bushels. To each pile is added 80 bushels of cotton-seed—and the earth and cotton-seed often are all. But either in ad-

dition to, or without cotton seed, the stable manure, as fast as it is produced, is given—and all the materials are thrown into a heap, and as well intermixed as may be. Marl, where to be had, is also added, and ashes. On Panola, last year, in the compost heap on each acre, besides the 100 loads of ditch-bank earth, or of the "brown deposit" of the river freshets, there was 40 bushels of marl, 10 bushels of ashes, 30 of cotton seed, and 1 bushel of both gypsum and salt. But the two latter ingredients are rarely used elsewhere.

In the spring, the compost heaps already in the fields, (and mostly made through the past winter,) and also the compost manure ridged up in the stock pens, are carted and laid in the drills, the land having been previously ploughed. The manure is quickly covered by the plough; and the planting of the several crops, in their proper order, soon follows.

As the materials, not only saved from the ordinary sources of supply of every farm, but from other sources, and with peculiar economy and care. It has been ascertained that rapid burning and large fires consume and destroy (or rather it should be said, drive off into the air,) a large proportion of the ashes which wood yields. This waste is very great in the burning and draught of ordinary fire-places, and much greater in the customary large log-heaps and violent fires of cleared wood-land. Hence, for the use of new clearings, and of drift wood departed by the freshets of the river, small fires and slow burning are used. The quantities of ashes thus obtained are very great. Messrs. Norfleet and Dancy, pay to their negroes 8 cents per bushel for all the ashes they will furnish; and they make a considerable supply from the numerous dead trees in the woods, and scattered drift logs. The larger collections of drift wood are burnt by the proprietors.

All these materials, and every other putrescent matter that accident may offer, are used in compost, or intermixture. And the general benefits are such, that the belief has become very extensive that intermixture alone, of any two or more different materials, serves to create new and important manuring value. The received reports of the general results of the practice, as shown in the large and increasing crops, and increased fertility of the lands so treated, are such as to permit no doubt to be entertained of there being great benefit and profit in the general. But still I would question the propriety of using, and of twice moving, and more than twice hauling the poorer of the earthy material used as well as the economy and profit of some of the attendant labors. Of this, more hereafter.

With such industry to procure materials, and with the unlimited supplies of the larger and poorer kinds, the amount of compost manure to be made is limited only by the labor that can be so directed. And the quantities actually made are enormous. Every careful farmer thus manures his whole cotton field, and more or less of land under crops. Of the Panola farm, having 600 acres of cleared land in all, compost was applied last spring to 350 acres now under culture, and guano to 50 acres more, 400 in all manured. The land now (or lately) under crops, is 220 in cotton, 225 in corn, 8 of sweet potatoes, 37 of oats, and 100 of broad-cast peas as a manuring crop. As in Edgecombe, so in Tarboro, the practice was so extended, had so long continued, and the effects were so well known and established in general opinion, that there was no room to doubt the ordinary and great benefits, even though there might have been many errors in the details, and many losses in particular, and wrong parts of the generally good system.

Thus, in two remotely separated communities, having not the least communication with or knowledge of each other, there have separately sprung up systems of manuring of almost precisely alike. My commendation of the general system of compost manuring in Edgecombe, and testimony of its benefits in improving both crops and land, have been sufficiently stated. I can also testify (though such might be inferred as incidents to all great and general improvement of lands,) that the farmers are intelligent in pursuing their plans—zealous and industrious in their labors—and managing well in the peculiar system they aim to pursue. I will now take the liberty of noting some things in which I think they err, either in acts of commission or omission.

1st. In their compost system, I think they err in using much earth as material which is too poor to pay for two transportations and more handlings. Enough of rich earth might be found and used instead, on almost every farm—or still better, marl for the flooring of stock pens. 2. A still earlier and more general error, is to omit the general and light marling (or liming) of all the fields in advance of the compost applications, or as early as possible. I say a light marling, because the marl making part of the compost would at every application serve to add to the quantity of marl, until the soil had been made sufficiently calcareous. If this most valuable material is not to be obtained on or near to every farm, marl nearly as rich as pure lime, from the more southern counties, might be brought by the railroad—or lime boated up the Tar river. At some times even the lime from Maine has been thus obtained as low as \$1 the cask. Mr. D. Bullock once bought 1000 casks of lime at that price, and used it as material for compost.

3. There is much loss of labor in the manner of carting the materials and carrying out and

Mr. Horn's farm is on Town Creek, where there is no marl, and where ashes are largely used instead. His whole farm consists of but 317 acres. Half of his arable land, would not have yielded to him at first more than 10 bushels of corn to the acre.

Mr. Robert R. Bridgers stated that he knew that the farming of Mr. Mercer, on Town Creek, yielded better returns than his own. But, different from most others, Mr. Mercer raised not only cotton for sale, but also corn and pork; so that a like statement of his cotton crop, if reported, would not do justice to his improvements and profits, in comparison with others, with whom cotton is the principal crop, and the only sale crop.

There are many others who in the last 10 or 12 years have, by compost manures, doubled their crops—fewer have tripled theirs, and still fewer, including the above named, have increased their fourfold.

If we had heard for the first time of these most usual practices, in advance of their ascertainment effects, there are few who would not utterly disbelieve in the great benefit of using such poor materials, and in any net profit from the whole laborious composting and application, to be repeated almost every crop, and the manuring and the cropping repeated every year. And if one, or a few farmers only had even had some year or two of experience, and reported the beneficial results, their favorable opinions would be ascribed to their sanguine temperament, mistake, or errors of judgment. But when so many farmers, of all and various conditions, have concurred for ten years or more in the same general procedure, and in so doing, have stopped the former general progress of impoverishment, and have produced great improvement of lands, and increase of crops and of profits, there remains no ground for a doubt as to the general beneficial results, and great profits, of the general procedure for such improvement. And their increased products and profits have been made, on lands cropped almost every year, (an omission is very rare,) and without any thing like a rotation of crops. Cotton occupies the same ground almost continually, and always for at least four or five years in close succession.

But in addition to these considerations, I have seen other and like facts of composting elsewhere, which were alleged to produce a great benefit, and were sustained by as ample and similar evidence. In Talbot county, Maryland, a few years ago, I saw in operation nearly the same system of making compost manures, and heard the like reports of general benefits thereof. The practices varied only in the different supplies of material. In Talbot, besides ditch banks, head-lands, or margins of fields, and other rich high-land soil, tide-marsh mud, was accessible, was largely used for the chief material of compost heaps. Also refuse or very low-priced fish, when to be obtained in quantities, sometimes made part of the richer parts of the bed or heap. Not only did intelligent proprietors so operate and improve on their own lands, but poor men who were but tenants at will—who paid rents that with us would be deemed much too high, (one-half of the wheat, and one-third of all other products of the rented farms,) and who yet had been growing richer in a long course of such business. As in Edgecombe, so in Talbot county, the practice was so extended, had so long continued, and the effects were so well known and established in general opinion, that there was no room to doubt the ordinary and great benefits, even though there might have been many errors in the details, and many losses in particular, and wrong parts of the generally good system.

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3. There is much loss of labor in the manner of carting the materials and carrying out and

applying the compost manure. The carts are all small, drawn by one mule, and have the ordinary narrow wheels. The carting of materials in summer is mostly limited to the time between the laying by the crops, and the beginning to gather fodder. None of this time can be lost; and if much rain occurs the ground is made soft, and the hauling heavy. Further—when carting out the manure in the spring, to be put in the opened drills, the field has then been ploughed, and of course the hauling is laborious. Hence, the ordinary loads of earth, or of compost, are estimated at only five bushels, to the one mule cart. Now, on dry or firm ground, and on so level a surface, a mule can easily haul eight bushels of moist marl or earth—and a two mule cart, 18 bushels, as I have fully tested in my extreme marling labors. And if using wheels five inches wide on the tread, the ground would be kept smooth and firm under the wheels, even if in a condition of moisture which would cause the ground to be cut up and become miry under narrow rimmed wheels. Two mule carts would require but half the present number of drivers. These remarks apply as well to the hauling of marl from the diggings.

4. The compost heaps are mostly, or to a great extent, built on the fields, each one in the middle of the acre which it is to cover. Of course, from the heap to the most distant parts of the acre, is but little more than forty yards—and this is the extreme distance to which the carts have to haul from each heap, and much of the hauling is within the distance of twenty yards. To use carts for such short trips is a great waste of labor—even though each cart may make 120 or more trips in a day. For such short distances, I think it probable that wheel barrows, (running over moveable plank tracks,) would be cheaper—or scrapers, if the texture of the compost admitted the use of the scraper.

5. The roads ascending from marl-pits (when such ascending roads are used) for want of uniform grading, and as gentle ascent as the ground would well allow, cause great increase of draught, and loss of power in hauling. Also, in every case observed, there were serious defects in the manner of working the pits, causing great loss of labor, and in some cases of marl also. All these defects might have been found out and remedied, by an attentive reading of my directions for working marl-pits, in the late (5th) edition of the "Essay on Calcareous Manures." This book was in the hands of most of these marlers; and their failure to attend to the instructions there given, and their readiness to admit the same from my verbal directions, is in evidence of how much more effective is the one mode of advice than the other. Printed and general instructions, however, applicable to practice, and to usual and various circumstances, are rarely well attended to and observed in practice even by the most intelligent readers. Yet the same persons, and also the less informed persons who rarely read for agricultural instruction, will eagerly listen to, and gladly profit by similar verbal directions, offered to each particular case and locality.

6. The good (or improving) land is cultivated so regularly every year, that it may be said to have no cessation of crop-bearing; and when under cotton, there is rarely a change to any other crop. It is alleged, (and I do not mean here to oppose the correctness of the opinion,) that the production of cotton, and quality of the product, are not impaired by the longest known continuation of culture, with 600 or 600 bushels of compost manure, (mainly of earth as described) annually supplied to the land. Even if so, the improvement might be more rapid, and products still better, if with more change of culture, and especially if preceding cotton, if only one year preceding 2 or 3 of continued cotton, by a manuring pea crop. There is no such thing attempted as any regular rotation of crops in Edgecombe.

7. A general error is to make too limited use of peas as a manuring crop. This is the most valuable plant for manuring in a southern climate—and (and there is a valuable clover in a more northern and humid climate—and nowhere does it grow better, with more certainty and more luxuriance, than on the soils of Edgecombe. Yet except as the universal secondary crop among corn, peas are rarely grown—and beneficial as is this mode, it is not sufficient to bring into operation half of the manuring value of this inestimable plant and crops, for this region.

8. Owing to the wide extent of cotton culture, and the small extent of forage crops and products—and the entire want of grass culture or of meadows, even on the lands admirably suited for grass—there is a frequent scarcity of hay. To supply the deficiency, northern hay is imported, and used not only by the townmen, but to more or less extent by some of the farmers of the country. This is a shame—a disgrace to the agriculture of Edgecombe, which I trust will not be suffered to continue much longer.

Thus, I have as freely condemned what I deemed wrong, as applauded what is right. But in censures thrown out on such slight opportunity for observation, it is more than probable that the cause may be in some degree mistaken. And even if not mistaken, he is not apt to be deemed correct in opinions entirely opposed to those of the censured.

Marlbourne, Va., Aug. 25, 1854.

Blessed is he who scattereth ashes upon the sidewalk, for he shall not slip down.

	R. R. Bridgers.	J. L. Horn.
1847,	19 bales.	27 bales.
1848,	33 "	43 "
1849,	53 "	54 "
1850,	88 "	83 "
1851,	136 "	137 "
1852,	185 "	165 "
1853,	170 "	182 "